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<110> ORION DIAGNOSTICA OY

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<150> GB 0315291.5

<151> 2003-06-30

<160> 36

<170> PatentIn version 3.0

<210> 1

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1

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Asn Pro Met Tyr Asn Ala Val Ser Asn Ala Asp Leu Met Asp Phe Lys
1          5          10          15
Asn Leu Leu Asp His Leu Glu Glu Lys Met Pro Leu Glu Asp Glu Val
20  ..          25          30
Val Pro Pro Gln Val Leu Ser Glu Pro Asn Glu Glu Ala Gly Ala Ala
35          40          45
Leu Ser Pro Leu Pro Glu Val Pro Pro Trp Thr Gly Glu Val Ser Pro
50          55          60
Ala Gln Arg Asp Gly Gly Ala Leu Gly Arg Gly Pro Trp Asp Ser Ser
65          70          75          80
Asp Arg Ser Ala Leu Leu Lys Ser Lys Leu Arg Ala Leu Leu Thr Ala
85          90          95
Pro Arg Ser Leu Arg Arg Ser Ser Cys Phe Gly Gly Arg Met Asp Arg
100          105          110
Ile Gly Ala Gln Ser Gly Leu Gly Cys Asn Ser Phe Arg Tyr
115          120          125

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<210> 2

<211> 28

<212> PRT

<213> Homo sapiens

<400> 2

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Ser Leu Arg Arg Ser Ser Cys Phe Gly Gly Arg Met Asp Arg Ile Gly
1          5          10          15
Ala Gln Ser Gly Leu Gly Cys Asn Ser Phe Arg Tyr
20          25

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<210> 3

<211> 98

<212> PRT

<213> Homo sapiens

<400> 3

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Asn Pro Met Tyr Asn Ala Val Ser Asn Ala Asp Leu Met Asp Phe Lys
1      5      10      15
Asn Leu Leu Asp His Leu Glu Glu Lys Met Pro Leu Glu Asp Glu Val
20      25      30
Val Pro Pro Gln Val Leu Ser Glu Pro Asn Glu Glu Ala Gly Ala Ala
35      40      45
Leu Ser Pro Leu Pro Glu Val Pro Pro Trp Thr Gly Glu Val Ser Pro
50      55      60
Ala Gln Arg Asp Gly Gly Ala Leu Gly Arg Gly Pro Trp Asp Ser Ser
65      70      75      80
Asp Arg Ser Ala Leu Lys Ser Lys Leu Arg Ala Leu Leu Thr Ala
85      90      95
Pro Arg

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<210> 4

<211> 108

<212> PRT

<213> Homo sapiens

<400> 4

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His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly
1      5      10      15
Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln
20      25      30
Val Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr
35      40      45
Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly His
50      55      60
Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met
65      70      75      80
Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser
85      90      95
Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His
100      105

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<210> 5

<211> 32

<212> PRT

<213> Homo sapiens

<400> 5

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Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
1      5      10      15
Arg Ile Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His
20      25      30

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<210> 6

<211> 76

<212> PRT

<213> Homo sapiens

<400> 6

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His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly

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1				5				10					15			
Leu	Gln	Glu	Gln	Arg	Asn	His	Leu	Gln	Gly	Lys	Leu	Ser	Glu	Leu	Gln	
			20					25					30			
Val	Glu	Gln	Thr	Ser	Leu	Glu	Pro	Leu	Gln	Glu	Ser	Pro	Arg	Pro	Thr	
		35					40					45				
Gly	Val	Trp	Lys	Ser	Arg	Glu	Val	Ala	Thr	Glu	Gly	Ile	Arg	Gly	His	
	50					55					60					

Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg
65 70 75

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<210> 7
<211> 378
<212> DNA
<213> Homo sapiens
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ccgaatgaag	aagcgggggc	tgctctcagc	cccctccctg	aggtgcctcc	ctggaccggg		180
gaagtcagcc	cagccagag	agatggaggt	gccctcgggc	ggggccctctg	ggactcctct		240
gatcgatctg	ccttcctaaa	aagcaagctg	agggcgctgc	tactgcccc	tcggagcctg		300
cggagatcca	gctgcctcgg	gggcaggatg	gacaggattg	gagcccagag	cggactgggc		360
tgtaacagct	tccggtac						378

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<210> 8
<211> 84
<212> DNA
<213> Homo sapiens
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ctgggctgta acagcttcgc gtac 84
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<210> 9
<211> 294
<212> DNA
<213> Homo sapiens
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<400> 9
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ccgaatgaag aagcggggggc tgctctcagc cccctccctg aggtgcctc ctggaccggg 180
gaagtcaagc cagcccgagag agatggagggt gccctcgctgc ggggccccctg ggactcctct 240
gatcgatctg cccctccataa aaqcaagctg agccgcgtgc tcactcccc tcgg 294
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<210> 10
<211> 324
<212> DNA
<213> Homo sapiens
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cgcaaccatt tgcaggggcaa actgtcggag ctgcaggtgg agcagacatc cctggagccc      120
ctccaggaga gcccccgctc cacaggtgtc tggaagtccc gggaggtagc caccgagggc      180
atccgtgggc accgcaaaat ggtcctctac accctgcgga caccacgaag cccaagatg      240
gtgcaagggt ctgctgctgt ttggagggaag atggaccgga tcagctcctc cagtggcctg      300
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ggctgcaaag tgctgaggcg gcat

324

<210> 11

<211> 96

<212> DNA

<213> Homo sapiens

<400> 11

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tccagtggcc tgggctgcaa agtgctgagg cggcat 96

<210> 12

<211> 228

<212> DNA

<213> Homo sapiens

<400> 12

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cgcaaccatt tgcagggcaa actgtcggag ctgcagggtgg agcagacatc cctggagccc 120
ctccaggaga gccccgtcc cacagggtgc tggaagtccc gggaggtagc caccgagggc 180
atccgtgggc accgcaaaat ggtcctctac accctgcggg caccacga 228

<210> 13

<211> 25

<212> PRT

<213> Artificial sequence

<400> 13

Ser Gly Leu Gln Glu Gln Arg Asn His Leu Arg Ser Ala Leu Leu Lys
1 5 10 15
Ser Lys Leu Arg Ala Leu Leu Thr Ala
20 25

<210> 14

<211> 107

<212> PRT

<213> Artificial sequence

<400> 14

His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly
1 5 10 15
Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln
20 25 30
Val Glu Gln Thr Ser Glu Asp Glu Val Val Pro Pro Gln Val Leu Ser
35 40 45
Glu Pro Asn Glu Glu Ala Gly Ala Ala Leu Ser Pro Leu Pro Glu Val
50 55 60
Pro Pro Trp Thr Gly Glu Val Ser Pro Ala Gln Arg Asp Gly Gly Ala
65 70 75 80
Leu Gly Arg Gly Pro Trp Asp Ser Ser Asp Arg Ser Ala Leu Leu Lys
85 90 95
Ser Lys Leu Arg Ala Leu Leu Thr Ala Pro Arg
100 105

<210> 15
 <211> 81
 <212> PRT
 <213> Artificial sequence

<400> 15

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Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn His Leu Gln
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Gly Lys Leu Ser Asp His Leu Glu Glu Lys Met Pro Leu Glu Asp Glu
20          25          30
Val Val Pro Pro Gln Val Leu Ser Glu Pro Asn Glu Glu Ala Gly Ala
35          40          45
Ala Leu Ser Pro Leu Pro Glu Val Pro Pro Trp Thr Gly Glu Val Ser
50          55          60
Pro Ala Gln Arg Asp Gly Gly Ala Leu Gly Arg Gly Pro Trp Asp Ser
65          70          75          80
Ser

```

<210> 16
 <211> 4
 <212> PRT
 <213> Artificial sequence

<400> 16

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Gly Lys Tyr Gly
1

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<210> 17
 <211> 174
 <212> PRT
 <213> Artificial sequence

<400> 17

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His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly
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Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln
20          25          30
Val Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr
35          40          45
Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly His
50          55          60
Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Asn Pro Met Tyr
65          70          75          80
Asn Ala Val Ser Asn Ala Asp Leu Met Asp Phe Lys Asn Leu Leu Asp
85          90          95
His Leu Glu Glu Lys Met Pro Leu Glu Asp Glu Val Val Pro Pro Gln
100         105         110
Val Leu Ser Glu Pro Asn Glu Glu Ala Gly Ala Ala Leu Ser Pro Leu
115         120         125
Pro Glu Val Pro Pro Trp Thr Gly Glu Val Ser Pro Ala Gln Arg Asp
130         135         140
Gly Gly Ala Leu Gly Arg Gly Pro Trp Asp Ser Ser Asp Arg Ser Ala
145         150         155         160
Leu Leu Lys Ser Lys Leu Arg Ala Leu Leu Thr Ala Pro Arg
165         170

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<210> 18

<211> 41
 <212> PRT
 <213> Artificial sequence

<400> 18

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Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn His Leu Gln
              5                      10              15
Gly Lys Leu Ser Gly Glu Val Ser Pro Ala Gln Arg Asp Gly Gly Ala
              20                      25              30
Leu Gly Arg Gly Pro Trp Asp Ser Ser
              35                      40
  
```

<210> 19
 <211> 234
 <212> PRT
 <213> Artificial sequence

<400> 19

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His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly
              5                      10              15
Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln
              20                      25              30
Val Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr
              35                      40              45
Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly His
              50                      55              60
Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met
              65                      70              75              80
Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser
              85                      90              95
Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His Asn Pro Met Tyr
              100                     105              110
Asn Ala Val Ser Asn Ala Asp Leu Met Asp Phe Lys Asn Leu Leu Asp
              115                     120              125
His Leu Glu Glu Lys Met Pro Leu Glu Asp Glu Val Val Pro Pro Gln
              130                     135              140
Val Leu Ser Glu Pro Asn Glu Glu Ala Gly Ala Ala Leu Ser Pro Leu
              145                     150              155              160
Pro Glu Val Pro Pro Trp Thr Gly Glu Val Ser Pro Ala Gln Arg Asp
              165                     170              175
Gly Gly Ala Leu Gly Arg Gly Pro Trp Asp Ser Ser Asp Arg Ser Ala
              180                     185              190
Leu Leu Lys Ser Lys Leu Arg Ala Leu Leu Thr Ala Pro Arg Ser Leu
              195                     200              205
Arg Arg Ser Ser Cys Phe Gly Gly Arg Met Asp Arg Ile Gly Ala Gln
              210                     215              220
Ser Gly Leu Gly Cys Asn Ser Phe Arg Tyr
              225                     230
  
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<210> 20
 <211> 31
 <212> PRT
 <213> Artificial sequence

<400> 20

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Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
              5                      10              15
Arg Ile Gly Ala Gln Ser Gly Leu Gly Cys Asn Ser Phe Arg Tyr
  
```

20

25

30

<210> 21
 <211> 75
 <212> DNA
 <213> Artificial sequence

<400> 21
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 gcgctgctca ctgcc 75

<210> 22
 <211> 321
 <212> DNA
 <213> Artificial sequence

<400> 22
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 cgcaaccatt tgcagggcaa actgtcggag ctgcaggttg agcagacatc cgaagatgag 120
 gtcgtgcccc cacaagtgtc cagtgcggcg aatgaagaag cgggggctgc tctcagcccc 180
 ctccctgagg tgcctccctg gaccggggaa gtcagcccag cccagagaga tggaggtgcc 240
 ctccggcggg gcccctggga ctctctgat cgatctgccc tcctaaaaag caagctgagg 300
 gcgctgctca ctgccctcg g 321

<210> 23
 <211> 241
 <212> DNA
 <213> Artificial sequence

<400> 23
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 ccatttgga gaaaagatgc ctttagaaga tgaggtcgtg cccccacaag tgctcagtga 120
 gccgaatgaa gaagcggggg ctgctctcag cccctccct gaggtgcctc cctggaccgg 180
 ggaagtcagc ccagcccaga gagatggagg tgccctcggg cggggcccct gggactcctc 240
 t 241

<210> 24
 <211> 522
 <212> DNA
 <213> Artificial sequence

<400> 24
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 ctccaggaga gccccgtcc cacaggtgtc tggaagtccc gggaggtagc caccgagggc 180
 atccgtgggc accgcaaaat ggtcctctac accctgcggg caccacgaaa tcccatgtac 240
 aatgcogtgt ccaacgcaga cctgatggat ttcaagaatt tgctggacca tttggaagaa 300
 aagatgcctt tagaagatga ggtcgtgccc ccacaagtgc tcagtgcagc gaatgaagaa 360
 gcgggggctg ctctcagccc cctccctgag gtgcctccct ggaccgggga agtcagccca 420
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 ctctaaaaa gcaagctgag ggcgtgctc actgcccctc gg 522

<210> 25
 <211> 123
 <212> DNA
 <213> Artificial sequence

<400> 25

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 ggggaagtca gcccagccca gagagatgga ggtgcctctg ggcggggccc ctgggactcc 120
 tct 123

<210> 26

<211> 123

<212> DNA

<213> Artificial sequence

<400> 26

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 cgcaaccatt tgcagggcaa actgtcggag ctgcagggtg agcagacatc cctggagccc 120
 ctccaggaga gccccgtcc cacagggtgc tggaagtccc gggaggtagc caccgagggc 180
 atccgtgggc accgcaaaat ggtcctctac accctgcggg caccacgaag ccccaagatg 240
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 ggctgcaaag tgctgaggcg gcataatccc atgtacaatg ccgtgtccaa cgcagacctg 360
 atggatttca agaatttgct ggaccatttg gaagaaaaga tgcctttaga agatgagggtc 420
 gtgccccac aagtgtctcag tgagccgaat gaagaagcgg gggctgctct cagccccctc 480
 cctgaggtgc ctccctggac cggggaagtc agccagccc agagagatgg aggtgccctc 540
 gggcggggcc cctgggactc ctctgatcga tctgccctcc taaaaagcaa gctgagggcg 600
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<210> 27

<211> 93

<212> DNA

<213> Artificial sequence

<400> 27

agccccaaaga tgggtgcaagg gtctggctgc tttgggagga agatggacag gattggagcc 60
 cagagcggac tgggctgtaa cagcttccg tac 93

<210> 28

<211> 27

<212> DNA

<213> Artificial sequence

<400> 28

gcggtatccca cccgctgggc agccccg 27

<210> 29

<211> 24

<212> DNA

<213> Artificial sequence

<400> 29

gctctagagg atgtctgctc cacc 24

<210> 30

<211> 24

<212> DNA

<213> Artificial sequence

<400> 30

gctctagaga agatgaggtc gtgc 24

<210> 31
 <211> 27
 <212> DNA
 <213> Artificial sequence

<400> 231
 gcgaattctc accgaggggc agtgagc

<210> 32
 <211> 25
 <212> DNA
 <213> Artificial sequence

<400> 32
 gcggatccta ccaccgctg ggcag

<210> 33
 <211> 1061
 <212> PRT
 <213> Homo sapiens

<400> 33

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Gly	Asn	Leu	Thr	Val	Ala	Val	Val	Leu	Pro	Leu	Ala	Asn	Thr	Ser	Tyr	35	40	45	
Pro	Trp	Ser	Trp	Ala	Arg	Val	Gly	Pro	Ala	Val	Glu	Leu	Ala	Leu	Ala	50	55	60	
Gln	Val	Lys	Ala	Arg	Pro	Asp	Leu	Leu	Pro	Gly	Trp	Thr	Val	Arg	Thr	65	70	75	80
Val	Leu	Gly	Ser	Ser	Glu	Asn	Ala	Leu	Gly	Val	Cys	Ser	Asp	Thr	Ala	85	90	95	
Ala	Pro	Leu	Ala	Ala	Val	Asp	Leu	Lys	Trp	Glu	His	Asn	Pro	Ala	Val	100	105	110	
Phe	Leu	Gly	Pro	Gly	Cys	Val	Tyr	Ala	Ala	Ala	Pro	Val	Gly	Arg	Phe	115	120	125	
Thr	Ala	His	Trp	Arg	Val	Pro	Leu	Leu	Thr	Ala	Gly	Ala	Pro	Ala	Leu	130	135	140	
Gly	Phe	Gly	Val	Lys	Asp	Glu	Tyr	Ala	Leu	Thr	Thr	Arg	Ala	Gly	Pro	145	150	155	160
Ser	Tyr	Ala	Lys	Leu	Gly	Asp	Phe	Val	Ala	Ala	Leu	His	Arg	Arg	Leu	165	170	175	
Gly	Trp	Glu	Arg	Gln	Ala	Leu	Met	Leu	Tyr	Ala	Tyr	Arg	Pro	Gly	Asp	180	185	190	
Glu	Glu	His	Cys	Phe	Phe	Leu	Val	Glu	Gly	Leu	Phe	Met	Arg	Val	Arg	195	200	205	
Asp	Arg	Leu	Asn	Ile	Thr	Val	Asp	His	Leu	Glu	Phe	Ala	Glu	Asp	Asp	210	215	220	
Leu	Ser	His	Tyr	Thr	Arg	Leu	Leu	Arg	Thr	Met	Pro	Arg	Lys	Gly	Arg	225	230	235	240
Val	Ile	Tyr	Ile	Cys	Ser	Ser	Pro	Asp	Ala	Phe	Arg	Thr	Leu	Met	Leu	245	250	255	
Leu	Ala	Leu	Glu	Ala	Gly	Leu	Cys	Gly	Glu	Asp	Tyr	Val	Phe	Phe	His	260	265	270	

Leu Asp Ile Phe Gly Gln Ser Leu Gln Gly Gly Gln Gly Pro Ala Pro
 275 280 285
 Arg Arg Pro Trp Glu Arg Gly Asp Gly Gln Asp Val Ser Ala Arg Gln
 290 295 300
 Ala Phe Gln Ala Ala Lys Ile Ile Thr Tyr Lys Asp Pro Asp Asn Pro
 305 310 315 320
 Glu Tyr Leu Glu Phe Leu Lys Gln Leu Lys His Leu Ala Tyr Glu Gln
 325 330 335
 Phe Asn Phe Thr Met Glu Asp Gly Leu Val Asn Thr Ile Pro Ala Ser
 340 345 350
 Phe His Asp Gly Leu Leu Leu Tyr Ile Gln Ala Val Thr Glu Thr Leu
 355 360 365
 Ala His Gly Gly Thr Val Thr Asp Gly Glu Asn Ile Thr Gln Arg Met
 370 375 380
 Trp Asn Arg Ser Phe Gln Gly Val Thr Gly Tyr Leu Lys Ile Asp Ser
 385 390 395 400
 Ser Gly Asp Arg Glu Thr Asp Phe Ser Leu Trp Asp Met Asp Pro Glu
 405 410 415
 Asn Gly Ala Phe Arg Val Val Leu Asn Tyr Asn Gly Thr Ser Gln Glu
 420 425 430
 Leu Val Ala Val Ser Gly Arg Lys Leu Asn Trp Pro Leu Gly Tyr Pro
 435 440 445
 Pro Pro Asp Ile Pro Lys Cys Gly Phe Asp Asn Glu Asp Pro Ala Cys
 450 455 460
 Asn Gln Asp His Leu Ser Thr Leu Glu Val Leu Ala Leu Val Gly Ser
 465 470 475 480
 Leu Ser Leu Leu Gly Ile Leu Ile Val Ser Phe Phe Ile Tyr Arg Lys
 485 490 495
 Met Gln Leu Glu Lys Glu Leu Ala Ser Glu Leu Trp Arg Val Arg Trp
 500 505 510
 Glu Asp Val Glu Pro Ser Ser Leu Glu Arg His Leu Arg Ser Ala Gly
 515 520 525
 Ser Arg Leu Thr Leu Ser Gly Arg Gly Ser Asn Tyr Gly Ser Leu Leu
 530 535 540
 Thr Thr Glu Gly Gln Phe Gln Val Phe Ala Lys Thr Ala Tyr Tyr Lys
 545 550 555 560
 Gly Asn Leu Val Ala Val Lys Arg Val Asn Arg Lys Arg Ile Glu Leu
 565 570 575
 Thr Arg Lys Val Leu Phe Glu Leu Lys His Met Arg Asp Val Gln Asn
 580 585 590
 Glu His Leu Thr Arg Phe Val Gly Ala Cys Thr Asp Pro Pro Asn Ile
 595 600 605
 Cys Ile Leu Thr Glu Tyr Cys Pro Arg Gly Ser Leu Gln Asp Ile Leu
 610 615 620
 Glu Asn Glu Ser Ile Thr Leu Asp Trp Met Phe Arg Tyr Ser Leu Thr
 625 630 635 640
 Asn Asp Ile Val Lys Gly Met Leu Phe Leu His Asn Gly Ala Ile Cys
 645 650 655
 Ser His Gly Asn Leu Lys Ser Ser Asn Cys Val Val Asp Gly Arg Phe
 660 665 670
 Val Leu Lys Ile Thr Asp Tyr Gly Leu Glu Ser Phe Arg Asp Leu Asp
 675 680 685
 Pro Glu Gln Gly His Thr Val Tyr Ala Lys Lys Leu Trp Thr Ala Pro
 690 695 700
 Glu Leu Leu Arg Met Ala Ser Pro Pro Val Arg Gly Ser Gln Ala Gly
 705 710 715 720
 Asp Val Tyr Ser Phe Gly Ile Ile Leu Gln Glu Ile Ala Leu Arg Ser
 725 730 735
 Gly Val Phe His Val Glu Gly Leu Asp Leu Ser Pro Lys Glu Ile Ile
 740 745 750

Glu Arg Val Thr Arg Gly Glu Gln Pro Pro Phe Arg Pro Ser Leu Ala
 755 760 765
 Leu Gln Ser His Leu Glu Glu Leu Gly Leu Leu Met Gln Arg Cys Trp
 770 775 780
 Ala Glu Asp Pro Gln Glu Arg Pro Pro Phe Gln Gln Ile Arg Leu Thr
 785 790 795 800
 Leu Arg Lys Phe Asn Arg Glu Asn Ser Ser Asn Ile Leu Asp Asn Leu
 805 810 815
 Leu Ser Arg Met Glu Gln Tyr Ala Asn Asn Leu Glu Glu Leu Val Glu
 820 825 830
 Glu Arg Thr Gln Ala Tyr Leu Glu Glu Lys Arg Lys Ala Glu Ala Leu
 835 840 845
 Leu Tyr Gln Ile Leu Pro His Ser Val Ala Glu Gln Leu Lys Arg Gly
 850 855 860
 Glu Thr Val Gln Ala Glu Ala Phe Asp Ser Val Thr Ile Tyr Phe Ser
 865 870 875 880
 Asp Ile Val Gly Phe Thr Ala Leu Ser Ala Glu Ser Thr Pro Met Gln
 885 890 895
 Val Val Thr Leu Leu Asn Asp Leu Tyr Thr Cys Phe Asp Ala Val Ile
 900 905 910
 Asp Asn Phe Asp Val Tyr Lys Val Glu Thr Ile Gly Asp Ala Tyr Met
 915 920 925
 Val Val Ser Gly Leu Pro Val Arg Asn Gly Arg Leu His Ala Cys Glu
 930 935 940
 Val Ala Arg Met Ala Leu Ala Leu Leu Asp Ala Val Arg Ser Phe Arg
 945 950 955 960
 Ile Arg His Arg Pro Gln Glu Gln Leu Arg Leu Arg Ile Gly Ile His
 965 970 975
 Thr Gly Pro Val Cys Ala Gly Val Val Gly Leu Lys Met Pro Arg Tyr
 980 985 990
 Cys Leu Phe Gly Asp Thr Val Asn Thr Ala Ser Arg Met Glu Ser Asn
 995 1000 1005
 Gly Glu Ala Leu Lys Ile His Leu Ser Ser Glu Thr Lys Ala Val Leu
 1010 1015 1020
 Glu Glu Phe Gly Gly Phe Glu Leu Glu Leu Arg Gly Asp Val Glu Met
 1025 1030 1035 1040
 Lys Gly Lys Gly Lys Val Arg Thr Tyr Trp Leu Leu Gly Glu Arg Gly
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 Ser Ser Thr Arg Gly
 1060

<210> 34

<211> 430

<212> PRT

<213> Homo sapiens

<400> 34

Gly Asn Leu Thr Val Ala Val Val Leu Pro Leu Ala Asn Thr Ser Tyr
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 20 25 30
 Gln Val Lys Ala Arg Pro Asp Leu Leu Pro Gly Trp Thr Val Arg Thr
 35 40 45
 Val Leu Gly Ser Ser Glu Asn Ala Leu Gly Val Cys Ser Asp Thr Ala
 50 55 60
 Ala Pro Leu Ala Ala Val Asp Leu Lys Trp Glu His Asn Pro Ala Val
 65 70 75 80
 Phe Leu Gly Pro Gly Cys Val Tyr Ala Ala Ala Pro Val Gly Arg Phe
 85 90 95

Thr Ala His Trp Arg Val Pro Leu Leu Thr Ala Gly Ala Pro Ala Leu
 100 105 110
 Gly Phe Gly Val Lys Asp Glu Tyr Ala Leu Thr Thr Arg Ala Gly Pro
 115 120 125
 Ser Tyr Ala Lys Leu Gly Asp Phe Val Ala Ala Leu His Arg Arg Leu
 130 135 140
 Gly Trp Glu Arg Gln Ala Leu Met Leu Tyr Ala Tyr Arg Pro Gly Asp
 145 150 155 160
 Glu Glu His Cys Phe Phe Leu Val Glu Gly Leu Phe Met Arg Val Arg
 165 170 175
 Asp Arg Leu Asn Ile Thr Val Asp His Leu Glu Phe Ala Glu Asp Asp
 180 185 190
 Leu Ser His Tyr Thr Arg Leu Leu Arg Thr Met Pro Arg Lys Gly Arg
 195 200 205
 Val Ile Tyr Ile Cys Ser Ser Pro Asp Ala Phe Arg Thr Leu Met Leu
 210 215 220
 Leu Ala Leu Glu Ala Gly Leu Cys Gly Glu Asp Tyr Val Phe Phe His
 225 230 235 240
 Leu Asp Ile Phe Gly Gln Ser Leu Gln Gly Gly Gln Gly Pro Ala Pro
 245 250 255
 Arg Arg Pro Trp Glu Arg Gly Asp Gly Gln Asp Val Ser Ala Arg Gln
 260 265 270
 Ala Phe Gln Ala Ala Lys Ile Ile Thr Tyr Lys Asp Pro Asp Asn Pro
 275 280 285
 Glu Tyr Leu Glu Phe Leu Lys Gln Leu Lys His Leu Ala Tyr Glu Gln
 290 295 300

 Phe Asn Phe Thr Met Glu Asp Gly Leu Val Asn Thr Ile Pro Ala Ser
 305 310 315 320
 Phe His Asp Gly Leu Leu Leu Tyr Ile Gln Ala Val Thr Glu Thr Leu
 325 330 335
 Ala His Gly Gly Thr Val Thr Asp Gly Glu Asn Ile Thr Gln Arg Met
 340 345 350
 Trp Asn Arg Ser Phe Gln Gly Val Thr Gly Tyr Leu Lys Ile Asp Ser
 355 360 365
 Ser Gly Asp Arg Glu Thr Asp Phe Ser Leu Trp Asp Met Asp Pro Glu
 370 375 380
 Asn Gly Ala Phe Arg Val Val Leu Asn Tyr Asn Gly Thr Ser Gln Glu
 385 390 395 400
 Leu Val Ala Val Ser Gly Arg Lys Leu Asn Trp Pro Leu Gly Tyr Pro
 405 410 415
 Pro Pro Asp Ile Pro Lys Cys Gly Phe Asp Asn Glu Asp Pro
 420 425 430

<210> 35
 <211> 1047
 <212> PRT
 <213> Homo sapiens

<400> 35

Met Ala Leu Pro Ser Leu Leu Leu Leu Val Ala Ala Leu Ala Gly Gly
 1 5 10 15
 Val Arg Pro Pro Gly Ala Arg Asn Leu Thr Leu Ala Val Val Leu Pro
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 Glu His Asn Leu Ser Tyr Ala Trp Ala Trp Pro Arg Val Gly Pro Ala
 35 40 45
 Val Ala Leu Ala Val Glu Ala Leu Gly Arg Ala Leu Pro Val Asp Leu
 50 55 60
 Arg Phe Val Ser Ser Glu Leu Glu Gly Ala Cys Ser Glu Tyr Leu Ala
 65 70 75 80

Pro Leu Ser Ala Val Asp Leu Lys Leu Tyr His Asp Pro Asp Leu Leu
 85 90 95
 Leu Gly Pro Gly Cys Val Tyr Pro Ala Ala Ser Val Ala Arg Phe Ala
 100 105 110
 Ser His Trp Arg Leu Pro Leu Leu Thr Ala Gly Ala Val Ala Ser Gly
 115 120 125
 Phe Ser Ala Lys Asn Asp His Tyr Arg Thr Leu Val Arg Thr Gly Pro
 130 135 140
 Ser Ala Pro Lys Leu Gly Glu Phe Val Val Thr Leu His Gly His Phe
 145 150 155 160
 Asn Trp Thr Ala Arg Ala Ala Leu Leu Tyr Leu Asp Ala Arg Thr Asp
 165 170 175
 Asp Arg Pro His Tyr Phe Thr Ile Glu Gly Val Phe Glu Ala Leu Gln
 180 185 190
 Gly Ser Asn Leu Ser Val Gln His Gln Val Tyr Ala Arg Glu Pro Gly
 195 200 205
 Gly Pro Glu Gln Ala Thr His Phe Ile Arg Ala Asn Gly Arg Ile Val
 210 215 220
 Tyr Ile Cys Gly Pro Leu Glu Met Leu His Glu Ile Leu Leu Gln Ala
 225 230 235 240
 Gln Arg Glu Asn Leu Thr Asn Gly Asp Tyr Val Phe Phe Tyr Leu Asp
 245 250 255
 Val Phe Gly Glu Ser Leu Arg Ala Gly Pro Thr Arg Ala Thr Gly Arg
 260 265 270
 Pro Trp Gln Asp Asn Arg Thr Arg Glu Gln Ala Gln Ala Leu Arg Glu
 275 280 285
 Ala Phe Gln Thr Val Leu Val Ile Thr Tyr Arg Glu Pro Pro Asn Pro
 290 295 300
 Glu Tyr Gln Glu Phe Gln Asn Arg Leu Leu Ile Arg Ala Arg Glu Asp
 305 310 315 320
 Phe Gly Val Glu Leu Gly Pro Ser Leu Met Asn Leu Ile Ala Gly Cys
 325 330 335
 Phe Tyr Asp Gly Ile Leu Leu Tyr Ala Glu Val Leu Asn Glu Thr Ile
 340 345 350
 Gln Glu Gly Gly Thr Arg Glu Asp Gly Leu Arg Ile Val Glu Lys Met
 355 360 365
 Gln Gly Arg Arg Tyr His Gly Val Thr Gly Leu Val Val Met Asp Lys
 370 375 380
 Asn Asn Asp Arg Glu Thr Asp Phe Val Leu Trp Ala Met Gly Asp Leu
 385 390 395 400
 Asp Ser Gly Asp Phe Gln Pro Ala Ala His Tyr Ser Gly Ala Glu Lys
 405 410 415
 Gln Ile Trp Trp Thr Gly Arg Pro Ile Pro Trp Val Lys Gly Ala Pro
 420 425 430
 Pro Ser Asp Asn Pro Pro Cys Ala Phe Asp Leu Asp Asp Pro Ser Cys
 435 440 445
 Asp Lys Thr Pro Leu Ser Thr Leu Ala Ile Val Ala Leu Gly Thr Gly
 450 455 460
 Ile Thr Phe Ile Met Phe Gly Val Ser Ser Phe Leu Ile Phe Arg Lys
 465 470 475 480
 Leu Met Leu Glu Lys Glu Leu Ala Ser Met Leu Trp Arg Ile Arg Trp
 485 490 495
 Glu Glu Leu Gln Phe Gly Asn Ser Glu Arg Tyr His Lys Gly Ala Gly
 500 505 510
 Ser Arg Leu Thr Leu Ser Leu Arg Gly Ser Ser Tyr Gly Ser Leu Met
 515 520 525
 Thr Ala His Gly Lys Tyr Gln Ile Phe Ala Asn Thr Gly His Phe Lys
 530 535 540
 Gly Asn Val Val Ala Ile Lys His Val Asn Lys Lys Arg Ile Glu Leu
 545 550 555 560

Thr Arg Gln Val Leu Phe Glu Leu Lys His Met Arg Asp Val Gln Phe
 565 570 575
 Asn His Leu Thr Arg Phe Ile Gly Ala Cys Ile Asp Pro Pro Asn Ile
 580 585 590
 Cys Ile Val Thr Glu Tyr Cys Pro Arg Gly Ser Leu Gln Asp Ile Leu
 595 600 605
 Glu Asn Asp Ser Ile Asn Leu Asp Trp Met Phe Arg Tyr Ser Leu Ile
 610 615 620
 Asn Asp Leu Val Lys Gly Met Ala Phe Leu His Asn Ser Ile Ile Ser
 625 630 635 640
 Ser His Gly Ser Leu Lys Ser Ser Asn Cys Val Val Asp Ser Arg Phe
 645 650 655
 Val Leu Lys Ile Thr Asp Tyr Gly Leu Ala Ser Phe Arg Ser Thr Ala
 660 665 670
 Glu Pro Asp Asp Ser His Ala Leu Tyr Ala Lys Lys Leu Trp Thr Ala
 675 680 685
 Pro Glu Leu Leu Ser Gly Asn Pro Leu Pro Thr Thr Gly Met Gln Lys
 690 695 700
 Ala Asp Val Tyr Ser Phe Gly Ile Ile Leu Gln Glu Ile Ala Leu Arg
 705 710 715 720
 Ser Gly Pro Phe Tyr Leu Glu Gly Leu Asp Leu Ser Pro Lys Glu Ile
 725 730 735
 Val Gln Lys Val Arg Asn Gly Gln Arg Pro Tyr Phe Arg Pro Ser Ile
 740 745 750
 Asp Arg Thr Gln Leu Asn Glu Leu Val Leu Leu Met Glu Arg Cys
 755 760 765
 Trp Ala Gln Asp Pro Ala Glu Arg Pro Asp Phe Gly Gln Ile Lys Gly
 770 775 780
 Phe Ile Arg Arg Phe Asn Lys Glu Gly Gly Thr Ser Ile Leu Asp Asn
 785 790 795 800
 Leu Leu Leu Arg Met Glu Gln Tyr Ala Asn Asn Leu Glu Lys Leu Val
 805 810 815
 Glu Glu Arg Thr Gln Ala Tyr Leu Glu Glu Lys Arg Lys Ala Glu Ala
 820 825 830
 Leu Leu Tyr Gln Ile Leu Pro His Ser Val Ala Glu Gln Leu Lys Arg
 835 840 845
 Gly Glu Thr Val Gln Ala Glu Ala Phe Asp Ser Val Thr Ile Tyr Phe
 850 855 860
 Ser Asp Ile Val Gly Phe Thr Ala Leu Ser Ala Glu Ser Thr Pro Met
 865 870 875 880
 Gln Val Val Thr Leu Leu Asn Asp Leu Tyr Thr Cys Phe Asp Ala Ile
 885 890 895
 Ile Asp Asn Phe Asp Val Tyr Lys Val Glu Thr Ile Gly Asp Ala Tyr
 900 905 910
 Met Val Val Ser Gly Leu Pro Gly Arg Asn Gly Gln Arg His Ala Pro
 915 920 925
 Glu Ile Ala Arg Met Ala Leu Ala Leu Leu Asp Ala Val Ser Ser Phe
 930 935 940
 Arg Ile Arg His Arg Pro His Asp Gln Leu Arg Leu Arg Ile Gly Val
 945 950 955 960
 His Thr Gly Pro Val Cys Ala Gly Val Val Gly Leu Lys Met Pro Arg
 965 970 975
 Tyr Cys Leu Phe Gly Asp Thr Val Asn Thr Ala Ser Arg Met Glu Ser
 980 985 990
 Asn Gly Gln Ala Leu Lys Ile His Val Ser Ser Thr Thr Lys Asp Ala
 995 1000 1005
 Leu Asp Glu Leu Gly Cys Phe Gln Leu Glu Leu Arg Gly Asp Val Glu
 1010 1015 1020
 Met Lys Gly Lys Gly Lys Met Arg Thr Tyr Trp Leu Leu Gly Glu Arg
 1025 1030 1035 1040

Lys Gly Pro Pro Gly Leu Leu
1045

<210> 36
<211> 541
<212> PRT
<213> homo sapiens

<400> 36

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Met Pro Ser Leu Leu Val Leu Thr Phe Ser Pro Cys Val Leu Leu Gly
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Trp Ala Leu Leu Ala Gly Gly Thr Gly Gly Gly Gly Val Gly Gly Gly
20      25      30
Gly Gly Gly Ala Gly Ile Gly Gly Arg Gln Glu Arg Glu Ala Leu
35      40      45
Pro Pro Gln Lys Ile Glu Val Leu Val Leu Leu Pro Gln Asp Asp Ser
50      55      60
Tyr Leu Phe Ser Leu Thr Arg Val Arg Pro Ala Ile Glu Tyr Ala Leu
65      70      75      80
Arg Ser Val Glu Gly Asn Gly Thr Gly Arg Arg Leu Leu Pro Pro Gly

      85      90      95
Thr Arg Phe Gln Val Ala Tyr Glu Asp Ser Asp Cys Gly Asn Arg Ala
100      105      110
Leu Phe Ser Leu Val Asp Arg Val Ala Ala Ala Arg Gly Ala Lys Pro
115      120      125
Asp Leu Ile Leu Gly Pro Val Cys Glu Tyr Ala Ala Ala Pro Val Ala
130      135      140
Arg Leu Ala Ser His Trp Asp Leu Pro Met Leu Ser Ala Gly Ala Leu
145      150      155      160
Ala Ala Gly Phe Gln His Lys Asp Ser Glu Tyr Ser His Leu Thr Arg
165      170      175
Val Ala Pro Ala Tyr Ala Lys Met Gly Glu Met Met Leu Ala Leu Phe
180      185      190
Arg His His His Trp Ser Arg Ala Ala Leu Val Tyr Ser Asp Asp Lys
195      200      205
Leu Glu Arg Asn Cys Tyr Phe Thr Leu Glu Gly Val His Glu Val Phe
210      215      220
Gln Glu Glu Gly Leu His Thr Ser Ile Tyr Ser Phe Asp Glu Thr Lys
225      230      235      240
Asp Leu Asp Leu Glu Asp Ile Val Arg Asn Ile Gln Ala Ser Glu Arg
245      250      255
Val Val Ile Met Cys Ala Ser Ser Asp Thr Ile Arg Ser Ile Met Leu
260      265      270
Val Ala His Arg His Gly Met Thr Ser Gly Asp Tyr Ala Phe Phe Asn
275      280      285
Ile Glu Leu Phe Asn Ser Ser Ser Tyr Gly Asp Gly Ser Trp Lys Arg
290      295      300
Gly Asp Lys His Asp Phe Glu Ala Lys Gln Ala Tyr Ser Ser Leu Gln
305      310      315      320
Thr Val Thr Leu Leu Arg Thr Val Lys Pro Glu Phe Glu Lys Phe Ser
325      330      335
Met Glu Val Lys Ser Ser Val Glu Lys Gln Gly Leu Asn Met Glu Asp
340      345      350
Tyr Val Asn Met Phe Val Glu Gly Phe His Asp Ala Ile Leu Leu Tyr
355      360      365
Val Leu Ala Leu His Glu Val Leu Arg Ala Gly Tyr Ser Lys Lys Asp
370      375      380
Gly Gly Lys Ile Ile Gln Gln Thr Trp Asn Arg Thr Phe Glu Gly Ile
385      390      395      400

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Ala	Gly	Gln	Val	Ser	Ile	Asp	Ala	Asn	Gly	Asp	Arg	Tyr	Gly	Asp	Phe
				405					410					415	
Ser	Val	Ile	Ala	Met	Thr	Asp	Val	Glu	Ala	Gly	Thr	Gln	Glu	Val	Ile
			420					425					430		
Gly	Asp	Tyr	Phe	Gly	Lys	Glu	Gly	Arg	Phe	Glu	Met	Arg	Pro	Asn	Val
		435					440					445			
Lys	Tyr	Pro	Trp	Gly	Pro	Leu	Lys	Leu	Arg	Ile	Asp	Glu	Asn	Arg	Ile
	450					455					460				
Val	Glu	His	Thr	Asn	Ser	Ser	Pro	Cys	Lys	Ser	Ser	Gly	Gly	Leu	Glu
465					470					475					480
Glu	Ser	Ala	Val	Thr	Gly	Ile	Val	Val	Gly	Ala	Leu	Leu	Gly	Ala	Gly
			485						490					495	
Leu	Leu	Met	Ala	Phe	Tyr	Phe	Phe	Arg	Lys	Lys	Tyr	Arg	Ile	Thr	Ile
			500					505					510		
Glu	Arg	Arg	Thr	Gln	Gln	Glu	Glu	Ser	Asn	Leu	Gly	Lys	His	Arg	Glu
	515						520					525			
Leu	Arg	Glu	Asp	Ser	Ile	Arg	Ser	His	Phe	Ser	Val	Ala			
	530					535					540				